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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,912	07/30/2003	James Christopher Matayabas JR.	042390P16905	9608

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EXAMINER

DINH, TUAN T

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,912

Applicant(s)

MATAYABAS ET AL.

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Group I claims 1-19) in the reply filed on 10/26/05 is acknowledged.

Claims 20-27 are canceled without prejudice.

Abstract

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to **a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-12, 14, 16, 17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4, 6-8, 11-12, 20-21, and 24-28 of U.S. Patent No. 6,924,027. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 1, 24, 27, and 28 of U.S. Patent 6,924,027 recite an electronic package comprising all of the limitations of claim 1 of instant application (a polyester matrix is a polymer matrix), and also claims 1 and 27 of U.S. Patent 6,924,027 disclose the limitations of claim 17 that depends from claim 1 of instant application.

Claim 2 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 2 that depends from claim 1 of the instant application.

Claim 5 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 5 that depends from claim 1 of the instant application.

Note: the nanocomposite would including a polycaprolactone material.

Claim 12 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 3 that depends from claim 1 of the instant application.

Claim 11 of U.S. Patent 6,924,027 recites "the melting point of the matrix polymer with a range temperature of room temperature and operating temperature" encompass

the limitation of "the melting point of the matrix polymer with a range of 40-130 of C" because the room temperature is about 70-75 of C, and operating temperature is about 80-100 of C." Therefore, claim 11 discloses all of the limitation as claimed in claim 3 that depends from claim 1 of the instant application.

Claim 13 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 4 that depends from claim 1 of the instant application.

Claim 6 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 15 that depends from claim 1 of the instant application.

Claims 13-14 of U.S. Patent 6,924,027 discloses the limitation as claimed in claims 6-8,13 that depends from claim 1 of the instant application.

Note: the rubber (resin) material as said in claims 13-14 of the U.S. Patent 6,924,027), which is a resin and having property to prevent moisture.

Claim 19 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 9 that depends from claim 1 of the instant application.

Claims 4, and 6-7 of U.S. Patent 6,924,027 recites "at least one clay material dispersed within the thermal interface material (TIM)" encompass the limitation of "the thermal conductive filler further includes a clay" because the TIM including the filler. Therefore, claims 4, and 6-7 disclose all of the limitation as claimed in claim 14 that depends from claim 1 of the instant application.

Claims 4, and 6-7 of U.S. Patent 6,924,027 recites "at least one clay material dispersed within the thermal interface material (TIM)" encompass the limitation of "the thermal conductive filler further includes a clay" because the TIM including the filler.

Therefore, claims 4, and 6-7 disclose all of the limitation as claimed in claim 14 that depends from claim 1 of the instant application.

Claims 8-9, 28 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 16 that depends from claim 1 of the instant application.

Claims 20-21 of U.S. Patent 6,924,027 discloses the limitation as claimed in claims 10-12 that depends from claim 1 of the instant application.

Claims 1, 24, 27, and 28 of U.S. Patent 6,924,027 discloses the limitation as claimed in claim 18 that depends from claim 1 of the instant application.

5. Claim 19 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-9, 11-14, 19-21, 24, and 27-28 of U.S. Patent No. 6,924,027 in view of Feng et al. (U.S. Patent. 6,620,515).

The U.S. Patent 6,924,027 does not disclose claim 19, Feng et al. shows a package in figure 2 comprising a second thermal plate (210) coupled on a cover (207) having a TIM (202) interpose therebetween.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second thermal plate of Feng et al. employed in the package of U.S. Patent 6,924,027 for the purpose of providing heat dissipation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tuan Dinh', with a long, sweeping horizontal line extending to the right.

Tuan Dinh
February 01, 2006.